Contraindications to this medication are a direct sensitivity to the medication and a possible crosssensitivity to other nonsteroidal inflammatory drugs. Caution should be observed in any patient with gastrointestinal symptoms and a past history of peptic ulcer or gastrointestinal bleeding, and this should be a reason for withdrawal of medication. There has been some fluid retention with the use of tolmetin sodium. The metabolites of this drug have been found to give a positive test for proteinuria utilizing sulfasalicylic acid, with no interference in tests for this urinary constituent using dye-impregnated commercial strips, or urine sticks. Use of this medication during pregnancy and in nursing mothers is not advised. The drug interactions have been few even though tolmetin sodium does extensively bind to plasma protein.

This drug can be used in conjunction with other treatments. Conjoint use with acetaminophen, gold, and steroids has been carried out. It is suggested that tolmetin sodium is an adjunct for the treatment of severe cases of rheumatoid arthritis. Studies also have indicated that in a number of patients there was an effective response to this medication. These responses cannot be predicted before its use; therefore, tolmetin sodium may be used if a substitute or an adjunct to therapy in patients with severe rheumatoid arthritis is needed.

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Newer Nonsteroidal Anti-Inflammatory Compounds

FEW ARTHRITIC PATIENTS can be cured, but most who suffer from the arthritides need not become prostrate cripples. Unfortunately, the key element that sets off the chain of events leading to synovitis is unknown. Until there is a better understanding of what triggers the disease, physicians cannot hope to intervene much earlier, and must be content with small improvements in treatment.

Family physicians, therefore, are put in the position of attempting to estimate minor benefits

of new anti-inflammatory drugs. However, even small degrees of improvement are welcomed by patients.

The most common drugs now available to family physicians are nonsteroidal anti-inflammatory agents such as talmetin, naproxin, fenaprofin calcium and ibuprofin. These drugs do add depth to the arthritis armamentarium. They all appear to be as effective as aspirin, but have fewer harmful side effects.

Naproxin (Naprosyn®) is an arylalkanoic acid derivative that has considerable promise in the treatment of arthritis. It has been widely tested in clinical trials. In the dosage of 250 mg twice a day it is comparable to aspirin and indomethacin but is tolerated better than either of these agents. Combination therapy using naproxin has been shown to be more effective than aspirin alone.

The mode of action of ibuprofin (Motrin®) in inflammation is unknown. It is an analgesic with nonsteroidal anti-inflammatory activity. It has been shown to have a suppressive mechanism of action on mediators of inflammation (such as decreasing prostaglandin synthesis) similar to indomethacin. One paper reports ketoprofin to be better tolerated than ibuprofin and at least as efficacious. Ibuprofin's significant anti-inflammatory activity appears to be effective only in the upper end of the range of 900 to 2,400 mg per day. Antiarthritic activity of the drug in lower dosages probably reflects a primary analgesic and perhaps an antipyretic effect rather than suppression of inflammation.

Fenoprofin calcium (Nalfon®) is another proprionic acid derivative, but its safety and effectiveness have not been established in rheumatic arthritic patients who are designated by the American Rheumatism Association as Functional Class IV (largely or wholly incapacitated with the patient bedridden or confined to a wheelchair permitting little or no self-care).

Talmetin (Tolectin®) is an effective and safe anti-inflammatory agent. In addition, it appears to be less toxic to the liver than even aspirin. In the case of juvenile rheumatoid arthritis, results of liver function tests improved during its administration and, again, it appeared to be as effective as aspirin in the short-term management of juvenile rheumatoid arthritis.

Scientific literature on arthritis practically ignores the recent excitement over hormonal therapy of rheumatoid arthritis. High blood levels of estro-

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gen and progesterone induced by weekly injections of these hormones paralleling the blood levels in early gestation are recommended by a few physicians but ignored by many. Family physicians should go slowly in ordering this program.

And last, a double-blind parallel trial of 42 subjects with shoulder pain showed that acupuncture was no more effective than placebo in relieving shoulder pain.

Even though considerable progress has been

made in the treatment of arthritis in the last 25 years, at the therapeutic heart remains an informed and sympathetic physician.

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